PLEXWRITER PX-230A

Model PX-230A

ATAPI CD-R/RW DRIVE

INSTALLATION AND USERS MANUAL

PLEXTOR®

JULY 2005

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Record Your Serial Number

For future reference, record the serial number and the TLA code (found on your drive's label) in the space provided below.

TLA/Firmware Revision Number

FEDERAL COMMUNICATIONS COMMISSION STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CANADIAN DEPARTMENT OF COMMUNICATIONS STATEMENT

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

This class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme a la norme NMB-003 du Canada.

LASER INFORMATION

These products have been designed and manufactured according to IEC 60825-1 on the Safety of Laser products. This product comes under “Class 1 Laser Products.”

CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

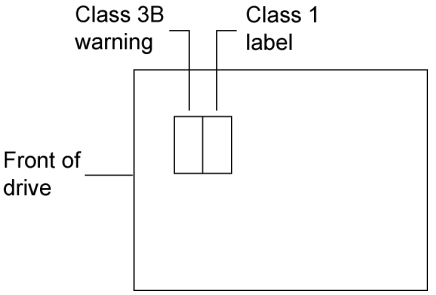
A Laser Caution Label is attached on the top of the internal drive model.

The laser beam emitted from the optical pickup is visible and invisible. Accordingly:

- Do not open the optical pickup housing.
- Obtain service only from Plextor-authorized personnel.

CAUTION: To disconnect the internal CD drive from an electrical current, pull out the computer’s power plug.

Top View of Internal Drive, Showing Caution Label Location



Detail of PX-230A Laser Caution Labels

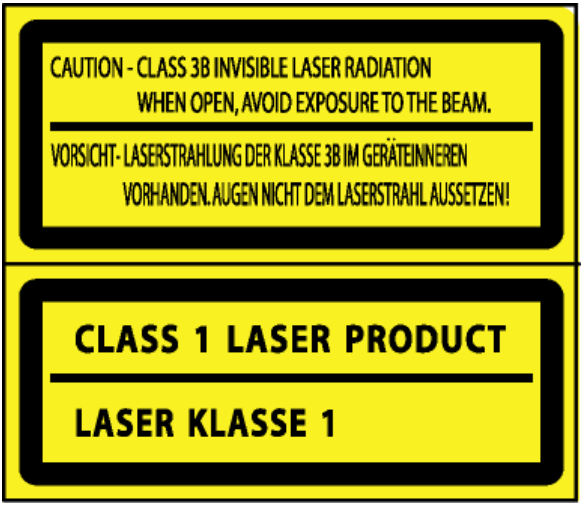

CAUTION - CLASS 3B INVISIBLE LASER RADIATION
WHEN OPEN, AVOID EXPOSURE TO THE BEAM.
VORSICHT- LASERSTRAHLUNG DER KLASSE 3B IM GERÄTEINNEREN
VORHANDEN. AUGEN NICHT DEM LASERSTRAHL AUSSETZEN!
CLASS 1 LASER PRODUCT
LASER KLASSE 1

Table of Contents

1. Getting Started 1
About this Manual 1
Meet Your PlexWriter PX-230A 1
What the PX-230A Does 1
Features of the PX-230A 2
Minimum Configuration to Use the PX-230A 3
What You Can Do with the PX-230A 3
About Software 4
Precautions 4
Where to Go From Here 5
2. Installing the PX-230A Internal ATAPI Drive 7
PX-230A Drive Features and Controls 7
Front Panel—PX-230A Internal Drive 7
Rear Panel—PX-230A Internal Drive 8
What Else Is In the PX-230A Box 9
Save Your Box! 9
Mount the PX-230A Drive 10
PX-230A QuickStart Installation 11
Open the Computer and Prepare for Installation 12
Determine Your Existing IDE Configuration 13
Inspect Your Computer's Cables 14
Do You Have Cable Select? 15
Do You Need a Power Cable? 16
Set the Drive's Mode Jumper 16
Changing the Mode Jumper on Your PX-230A Drive 17
Select an IDE Configuration 19
About Cable Select 24
Mount the PX-230A Drive 25
Record the Serial Number 25
Mount the Drive in the Computer 25
Using Sound Boards and Audio Cables 30

3. Using Your PX-230A 33
What Media to Use 33
Tray Loading and Operation 34
Handling Blank CD Media 35
Cleaning Discs 35
Mounting Position 36
Writing to CD-R and CD-RW Media 36
Using the Disc/Busy Indicator 36
4. Maintenance and Troubleshooting 37
Cleaning the PX-230A Drive 37
Upgrading Firmware 38
Emergency Eject 39
Troubleshooting 40
Make Sure the Drive Is Recognized 40
Further Troubleshooting 41
5. Frequently Asked Questions 43
Appendix A: PX-230A Specifications 45
Appendix B: Technical Support 55
How to Contact Plextor Technical Support 56
Before You E-mail or Call for Support 56
Returns 57
Contacting Plextor's RMA Department 57
Packing Your Drive 57
Shipping Your Drive to Plextor 58
Appendix C: Warranty 59
If You're Outside the U.S. or Canada 60
Index 61

1. Getting Started

Congratulations! Thank you for purchasing the Plextor® PlexWriter PX-230A, a reliable, high-performance recordable CD writer, rewriter, and player. We appreciate the confidence you have shown in us. Our goal is to put you—and keep you—on the leading edge of CD technology.

About this Manual

Please read this manual carefully and keep it handy for easy reference. Use the manual for installation, operation and troubleshooting. If your drive needs service, see your dealer or call Plextor's Technical Support Department.

In this manual you should find all the information you need to successfully install, operate and troubleshoot your drive. If you run into a problem that doesn't seem to be covered, however, please contact us. (See "Appendix B: Technical Support" for the different ways you can reach us.) You will be connected to our friendly, helpful band of tech support engineers. What might seem like an uncooperative drive to you could very well be a 30-second fix to them. But we will never know unless you contact us.

Meet Your PlexWriter PX-230A

The PlexWriter PX-230A is a CD ReWritable drive that provides professional quality performance for CD writing, rewriting and reading.

What the PX-230A Does

- Writes to CD-R (recordable CD) media at up to 52X speed.
- Writes to CD-RW (rewritable CD) media at up to 32X speed.
- Reads all CD-ROM, CD-RW, and CD-R data media at a maximum of 52X speed.
- Reads CD-DA (audio) and CD-R audio media at up to 52X speed.
- Reads CD-RW audio media at up to 40X speed.

Features of the PX-230A

- *ATAPI interface:* The PX-230A easily installs in virtually any PC with an E-IDE ATAPI interface.

- *High speed transfers*: Supports Ultra DMA Mode 2, Multiword DMA Mode 2, and PIO Mode 4. (DMA mode switching is handled by the operating system software.)

- *MMC compliance*: Supports the MMC-3 command set.

- *Flash memory*: Allows upgrading the PX-230A to the latest firmware revision (available from the Plextor web site) without opening the computer or physically accessing the drive.

- *Black tray*: Reduces the effect of optical distortion by absorbing reflections from the laser beam, enhancing read quality.

- *Plug and Play*: Supports Windows Plug and Play.

- *Variety of recording modes*: Supports track-at-once, disc-at-once, session-at-once, multi-session, variable and fixed packet writing, CD-MRW (Mount Rainier), and raw writing.

- *Buffer Underrun Proof Technology*: Eliminates buffer underrun errors, so you can safely use your computer for other tasks while you're writing to a CD-R or CD-RW disc.

- *High-quality DAE*: The PX-230A provides extraordinarily high-quality digital audio extraction.

- *Wide compatibility*: Wide CD-R and CD-RW media compatibility.

- *Orange Book compatibility*: Compatible with Orange Book, Parts II and III.

- *OPC*: Optimum Power Control, which adjusts the laser power for the optimum write strategy.

- *CD-TEXT, Karaoke CD:* Supports CD-TEXT and Karaoke CD (VCD format) writing.

- *Small form factor*: To maximize space inside your computer, depth of the PX-230A without its bezel is just 6.8 inches (172.5 millimeters).

Minimum Configuration to Use the PX-230A

Here's what you'll need in order to install and use the PX-230A drive.

- **Computer**: Pentium III, 500-MHz or faster CPU.
- **Minimum RAM**: 128 MB.
- **Interface**: Model PX-230A requires an IDE ATAPI interface.
- **Hard disk size**: To write to a CD in image mode (that is, to write an image of a CD to your hard disk), you need 1 GB of free space. (For more accurate guidelines, see the help files or documentation for the recording software you're using.)
- **Operating System**: The PX-230A operates under Windows XP, 2000, Me, 98SE (Second Edition), or 98.

  NOTE: Roxio Easy Media Creator 7 software requires Windows 2000/XP.

What You Can Do with the PX-230A

Just look at some of the things you can do with your PX-230A:

- Record data or audio onto writable or rewritable CD media.
- Play music CDs.
- Save photos and other images on rewritable or writable CDs.
- Create a CD "sneakernet" to share information with colleagues—just use software to drag and drop files onto CD-R or CD-RW media, then continue adding files and sharing the same disc.
- Archive images and video to CD.
- Master new software programs on CD.

About Software

In order to record on CD-R/RW discs you will need to have mastering, packet writing, or duplication software installed on your computer system. If you purchased a retail kit from Plextor, you'll get software packages that include such software.

For details on other software that is available for writing to CDs, please visit the web sites of the companies whose software you are interested in, refer to their user's manuals, or look at the help option within the software. A list of various software that you can use with your Plextor drive can be found in the Support/Compatibility section of www.plextor.com.

Precautions

Like the rest of your computer system, your PX-230A requires reasonable care in its installation and use.

- Keep the area around your drive clean from dust, smoke, and other contaminants.
- Do not allow moisture or liquids, including water or cleaning fluids, to touch the drive. Thinner, benzene, or alcohol-based solvents can mar your drive's surface.
- Do not drop or jolt the drive.
- Do not move, carry or transport a disc in the drive because this can cause damage.
- Do not attempt to open the drive and service it yourself. Removing the cover may expose you to harmful electrical voltages or the laser beam. For your safety, entrust service to experienced service personnel only.
- Keep your CDs free of dirt or other contaminants, by storing them in jewel cases. Use only industry-standard discs. Do not insert dirty, warped, poorly balanced, or cracked discs into the drive.

- Do not clean discs using a circular motion. Instead, using a soft, dry cloth, wipe gently in a radial motion; start at the center of the disc and proceed to the outer edge.
- Do not attempt to clean your drive using solvent-based cleaners or an air compressor.
- Do not attempt to clean your drive using a CD cleaning disc. These discs can damage your drive permanently.

Where to Go From Here

- See Chapter 2, beginning on page 7, to learn how to install your drive.

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2. Installing the PX-230A Internal ATAPI Drive

This chapter explains how to physically install your PX-230A internal ATAPI drive in your computer.

PX-230A Drive Features and Controls

Before proceeding, become familiar with the controls and features of your Plextor drive. Match the parts of your drive to the illustrations below.

Front Panel—PX-230A Internal Drive

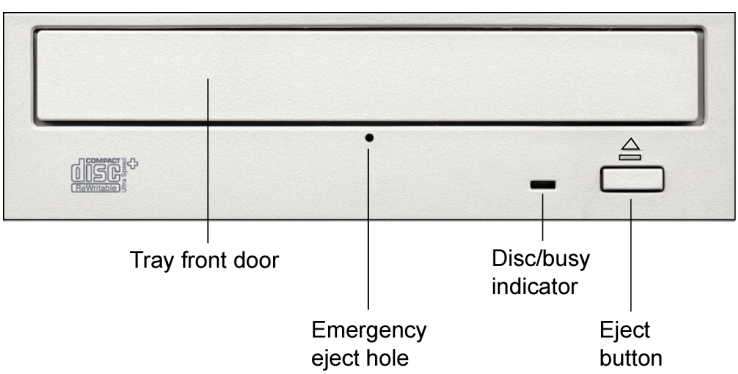


Figure 1: Front panel of the PX-230A internal ATAPI drive

- **Disc/busy indicator**: Illuminated solid green when ready. Illuminated blinking green when reading and writing. (Blink rate indicates the type of activity.)

- **Tray front door**: Attached to tray drawer.

- **Emergency eject hole**: If the automatic eject button does not work, insert the emergency eject tool, paper clip, or other thin, rigid object in this hole to eject tray. Turn OFF power before using this feature.

- **Eject button**: Push once to eject tray. Push again to insert the tray back into the PX-230A. To prevent wear on the drive, always use the eject button to insert the tray.

Rear Panel—PX-230A Internal Drive

Also familiarize yourself with the drive's rear panel.

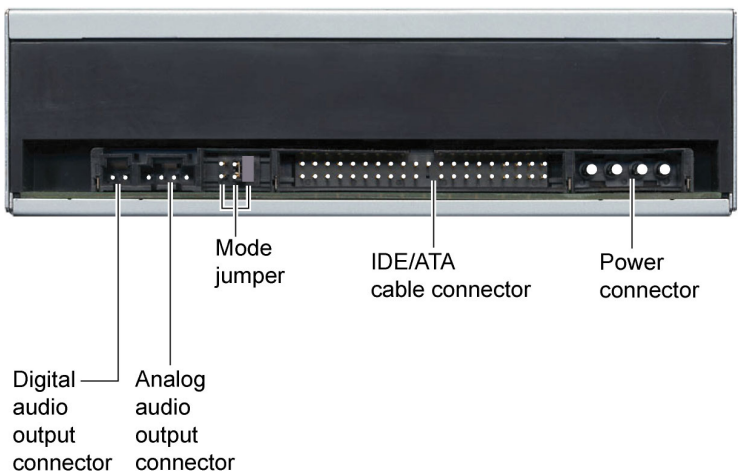


Figure 2: Rear panel of the PX-230A internal ATAPI drive

- **Digital audio output connector**: Outputs a digital stereo signal. Use this to connect to a sound board that supports Sony/Philips Digital Interface (SPDIF) or Digital-In.

- **Analog audio output connector**: Outputs an analog stereo signal. Use this to connect to a sound board or audio amplifier. Use a standard MPC-3 type, 4-pin connector.

- **Mode jumper**: Use the mode jumper to select operation as an IDE master or slave, or for cable select. In general, leave this jumper at its factory setting, which is master; and ensure that any other device on the bus is jumpered as slave.
- **IDE/ATA cable connector**: Connects to your computer's IDE (ATAPI) interface using a standard 40-conductor IDE cable or an 80-conductor IDE/ATA cable.
- **Power connector**: Connects to your computer's power supply to provide DC +5 volts and +12 volts to the PX-230A.

What Else Is In the PX-230A Box

What you find in your Plextor box depends on what the company that sold you the box put in—or took out—while the Plextor drive was in their possession. Plextor currently sells the PX-230A drive in this configuration:

- PX-230A CD-R/RW drive
- 4 mounting screws
- Extra jumper
- Emergency eject tool
- *Quick Installation Guide*
- Plextor software disc with bundled software and PDF of *PX-230A Installation and Users Manual*

NOTE: The PX-230A retail package does not contain an IDE ribbon cable. You can connect your Plextor drive to the free connector on any existing 40-pin or 80-pin ribbon cable in your computer.

Save Your Box!

Be sure to save the box after you have installed your drive. The box and its packaging material were designed and drop tested to ensure your drive can endure rough treatment and still arrive in working order. If you have to ship your drive back to Plextor, you'll want to send it in the original box. (For more details about returning your drive to Plextor, see page 57.)

If the security sticker on top of your box is cut, there may be a good reason: for example, a dealer may have added other components or software. Carefully check the contents to ensure nothing has been removed. If something is missing, contact the party from whom you purchased the box for an explanation.

NOTE: This applies to the Plextor retail box. Your drive may have been shipped in a different box with other contents, depending on whom you purchased the drive from and what they included inside the box.

If your drive came pre-installed, some or all of the items above may have been installed and may not be separately available. See the Plextor web site for locations to purchase additional or replacement accessories.

Mount the PX-230A Drive

Installation steps are as follows:

1. Turn OFF your computer system.
2. Set the jumpers for your new PX-230A drive, if necessary.
3. Mount the drive into an available drive bay inside the computer system.
4. Make all necessary cabling connections: IDE cable, power cable, and audio cable.
5. Turn your computer system ON.

The following pages give more details for this procedure.

PX-230A QuickStart Installation
For Experienced PC Users Only

If you've installed computer peripherals before, use this QuickStart installation to get up and running quickly.

Typical Scenario 1: You have a PC with an IDE interface installed, you have Windows 98, 98SE, Me, 2000, or XP, and you have nothing installed on the secondary IDE port. **What to do**: Leave the PX-230A's jumper set to Master, attach it to the secondary IDE port, and go. Windows will recognize the drive automatically.

Typical Scenario 2: You have a PC with an IDE interface installed, you have Windows 98, 98SE, Me, 2000, or XP, the primary IDE port already has two devices connected and you have a CD-ROM installed on the secondary IDE port. **What to do**: Change the CD-ROM to Slave, leave the PX-230A's jumper set to Master and attach the PX-230A to the secondary IDE port. Windows recognizes the new drive automatically.

If neither of these situations applies to you, or you're not comfortable with IDE installation, read the rest of this chapter for more detailed installation instructions.

Open the Computer and Prepare for Installation

To determine whether your PX-230A will be a Master or a Slave, open your computer and examine the IDE connections to the motherboard.

To open the computer:

1. Before proceeding, make sure the power to your computer and any external peripherals is OFF and your computer is UNPLUGGED from its power source.

2. Remove your computer's cover, following the directions provided by your computer's manufacturer. Typically, this involves loosening or removing several screws on the back panel of your computer and sliding off the cover. See Figure 3 for an example.

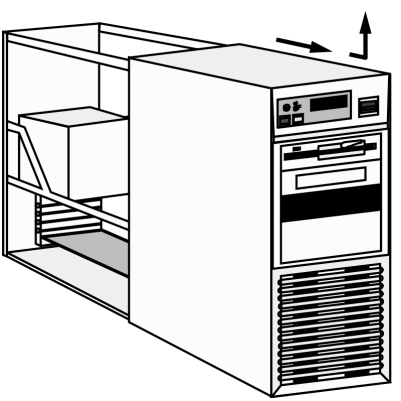


Figure 3: Removing a typical computer's cover

Determine Your Existing IDE Configuration

With your computer open, determine the existing IDE configuration. You can do this by looking at the IDE ribbon cable (or cables—there may be two) and seeing what is connected to them.

One end of the IDE cable connects to the IDE port on your computer's motherboard; and there are usually two other connectors for attaching peripheral devices such as a hard disk, DVD or CD-ROM drive, or your PX-230A drive. If there are two devices, one is configured as *Master* and the other the *Slave,* as indicated by the position of jumpers on the back of the drive.

If your computer is set up for Cable Select, or CSEL, both devices will be jumpered as *Cable Select*. In older computer, this configuration required a special Cable Select cable.

If there are two IDE cables, one is for the *primary* IDE bus and the other is for the *secondary* bus.

Before you install your PX-230A, your computer's IDE configuration is usually one of the following:

- **Configuration A**: Hard disks connected as Master and Slave devices on primary IDE port; DVD or CD-ROM drive connected as the Master device on secondary IDE port.
- **Configuration B**: Hard disk connected as Master device and DVD or CD-ROM drive connected as Slave on the primary IDE port; nothing connected to secondary IDE port.
- **Configuration C**: Hard disk connected as Master device on primary IDE port; nothing connected to secondary IDE port.
- **Configuration D**: System uses special "Cable Select" cables; all devices are jumpered for Cable Select.

Inspect Your Computer's Cables

You can use either the older 40-conductor IDE cable or the newer 80-conductor IDE/ATA cable.

NOTE: The PX-230A retail package does not contain an IDE ribbon cable. You can connect your Plextor drive to the free connector on any existing 40-pin or 80-pin ribbon cable in your computer. If your computer's ribbon cables don't have a free connector, you will have to purchase another ribbon cable.

Although the newer cable has 80 conductors (wires), its connectors have only 40 pins, so it's physically interchangeable with the older cable. The 80-conductor cable is slightly wider than the older 40-conductor version. The wires in the 80-conductor version are narrower, too.

CAUTION: The length of any IDE or IDE/ATA cable cannot exceed 18 inches.

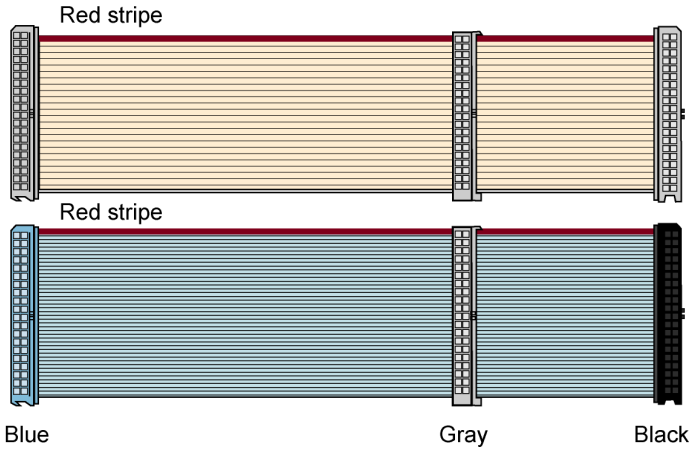


Figure 4: You can use either the older 40-conductor cable (top) or the new 80-conductor type (bottom).

Do You Have Cable Select?

Many computers from major manufacturers use special Cable Select cables. The Cable Select cable typically has markings that identify the connectors for Master, Slave, and Motherboard; or else it has colored connectors that identify the connections.

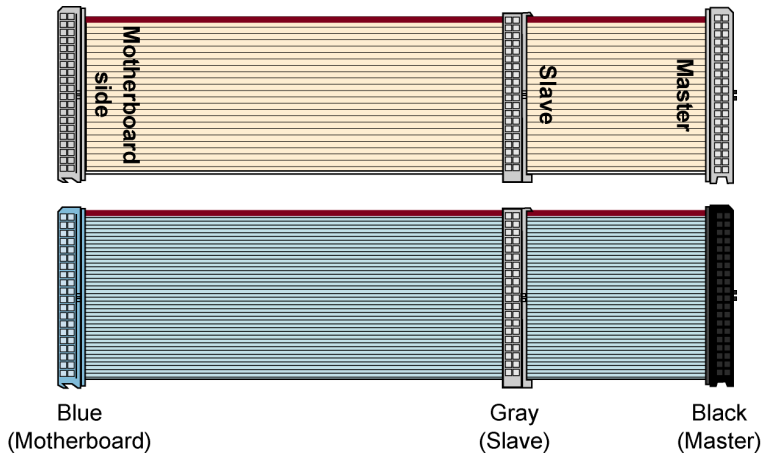


Figure 5: Cable Select cables may have either markings (top) or colored connectors to indicate where to attach the master and slave devices.

In the case of an 80-conductor cable with colored connectors:

- The blue connector attaches to the computer motherboard or controller.
- The gray connector is in the middle of the cable, and goes to any slave (device 1) drive, if present.
- The black connector is at the opposite end from the host connector and goes to the master drive (device 0), or to a single drive if only one is used.

If you are unsure whether or not your system has a Cable Select cable installed, either look at the cable or look at the jumpers on the existing DVD-ROM or CD-ROM drive. If any device is jumpered as Cable Select, then both devices on that cable must be jumpered that way.

Do You Need a Power Cable?

In most computers, you will find extra power connectors in the computer ready for your use. When you open the computer, check the cable running from your power supply to your hard disk drive and see if it has extra connectors on it. If so, you can plug one of these into the power connector found on the rear panel of the PX-230A.

If you do not find any additional connectors (either because they were not supplied or they are all in use), you will have to buy a "splitter" or a "Y-connector." These can also be found at most retail and mail-order computer stores.

Set the Drive's Mode Jumper

You specify your drive's Master, Slave, or Cable Select setting before installing it. You do this by changing the position of a jumper on the mode jumper block at the rear of the drive.

Your drive ships from our factory with its mode jumper set to operate the PX-230A as a Master. This will work in most custom system configurations. If your computer is from a large OEM system manufacturer such as IBM, Hewlett Packard/Compaq, Dell, or Gateway, you will need to pay particular attention to whether the computer uses the Cable Select scheme.

NOTE: The jumper configuration on the drive has priority over Cable Select. So if the jumper of one device on a cable is set to Master, the jumper of the other device must be set for Slave. In this case, location of the devices on the cable is not important.

If you have only one device, it must be set to Master or Cable Select, and if possible, it should be at the end of the cable.

Changing the Mode Jumper on Your PX-230A Drive

The drive arrives from the factory with its mode jumper set to Master. (A function is ON if the jumper is installed and OFF if the jumper is removed.)

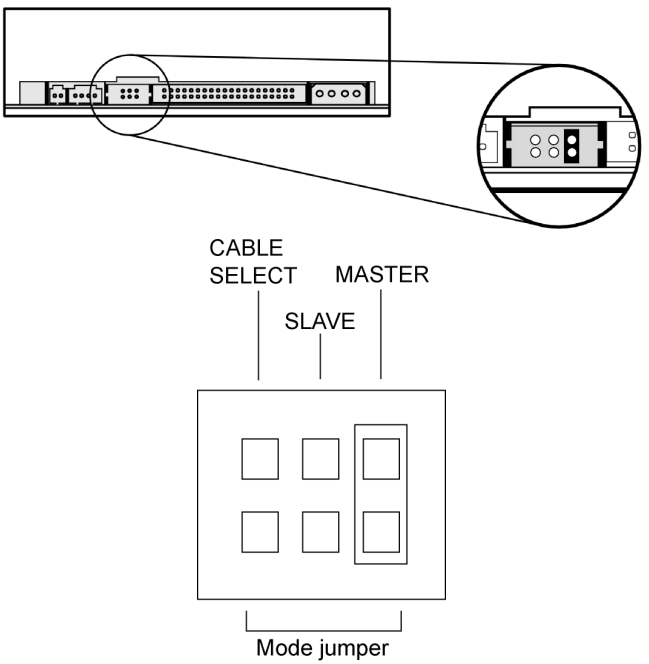


Figure 6: Factory settings for mode jumper at the rear of the internal drive

Changing to a Master, Slave, or Cable Select

The Master/Slave/Cable Select setting for the drive is determined by the mode jumper. The jumper is placed over one of the sets of mode pins. To change the drive from Master to Slave or to Cable Select, you must move the jumper.

For example, to change the drive to be a Slave, move the jumper to the middle set of mode pins, leaving the other pins uncovered. To change the drive for Cable Select, move the jumper to the left set of mode pins.

Note that if any device is jumpered as Cable Select, then *both* devices connected to that cable must be jumpered as Cable Select. (And the cable you use must be a special Cable Select cable. The newer 80-conductor IDE/ATA cable supports Cable Select.)

Changing Jumper Settings

- To remove a jumper, pull it off with your fingers or a pair of needle-nose pliers.
- To install a jumper, push it onto the jumper pins.

CAUTION: Ensure power to the drive is OFF before installing or removing a jumper.

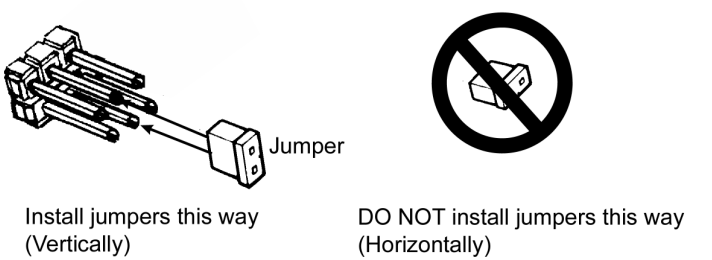


Figure 7: Install the mode jumper across vertical pairs of pins

CAUTION: Install the mode jumper across the pins as shown (vertically). Do not connect one pin switch to another by installing the jumper lengthwise (horizontally). Doing so could result in damage to the drive.

Select an IDE Configuration

Set the PX-230A's jumper and cable it according to the desired configuration. Keep these rules in mind:

- For best CD-RW performance, try to connect the PX-230A to the IDE port that is not connected to the hard disk drive or to a DVD or CD-ROM drive. In most cases, this will be the secondary IDE port.
- For best results, set the PX-230A to be the Master, if possible.
- If you have only one device on a cable, always set its jumper as the Master, never as the Slave.

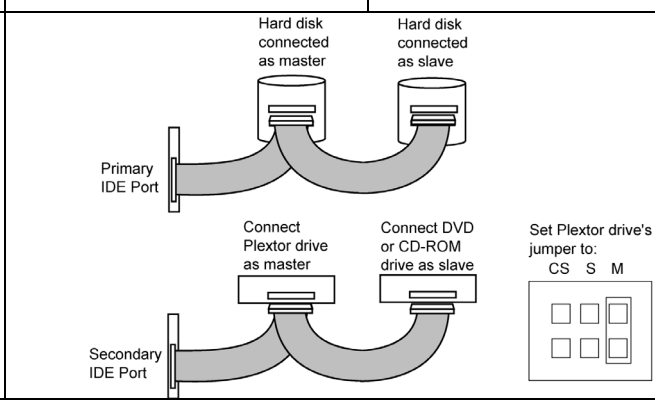
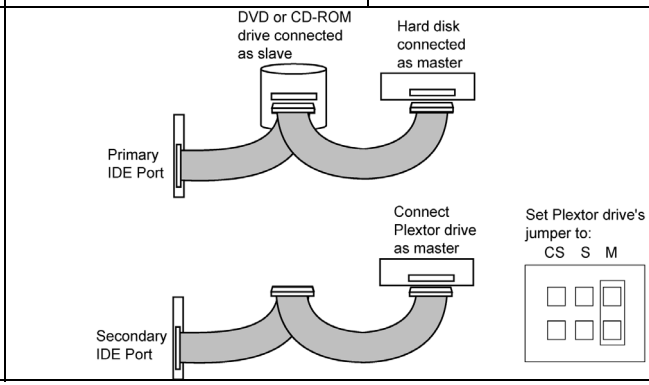
	Before PX-230A Installation	How to Install the PX-230A
A	Hard disks connected as Master and Slave devices on primary IDE port; DVD-ROM or CD-ROM drive connected as Master device on secondary IDE port.	Remove the DVD-ROM or CD-ROM drive, change it to Slave, and re-connect it to the secondary IDE port. Set the mode jumper to Master, and connect the PX-230A as Master device to the secondary IDE port.
		

Figure 8. How to install the PX-230A if your computer is originally set up in configuration A

NOTE: The configuration shown in Figure 8 can make it very difficult to write from the DVD or CD drive to the PX-230A at maximum rated speed using “on-the-fly” copying.

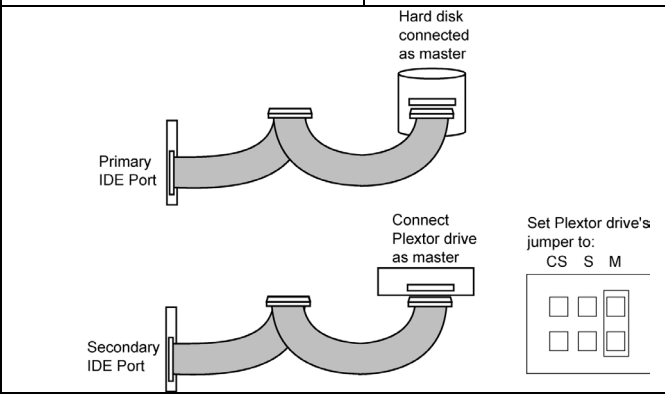
System configuration and performance will make a big difference. Depending on how fast the DVD or CD-ROM drive can stream data to the PX-230A, it may not be fast enough to keep the buffer full. In this case, the buffer may become empty and a buffer underrun error may occur. However, because it is equipped with Buffer Underrun Proof Technology, your PX-230A can still make successful copies if you use software that supports this feature. (All software shipped with PX-230A drive retail kits supports Buffer Underrun Proof Technology.)

If you still have problems writing with this configuration, use the image writing method (that is, write an image to your hard drive, then write that image onto the CD-R/RW media in your PlexWriter), or record at a lower speed. We also recommend that DMA be enabled on your computer, if your system supports it.

	Before PX-230A Installation	How to Install the PX-230A
B	Hard disk connected as Master device, and CD-ROM or DVD-ROM drive connected as Slave on the primary IDE port; nothing connected to secondary IDE port.	Set the mode jumper to Master, and connect the PX-230A as Master to secondary IDE port.
		

DVD or CD-ROM drive connected as slave
Hard disk connected as master
Primary IDE Port
Connect Plextor drive as master
Set Plextor drive's jumper to:
CS S M
Secondary IDE Port

Figure 9. How to install the PX-230A if your computer is originally set up in configuration B

	Before PX-230A Installation	How to Install the PX-230A
C	Hard disk connected as Master device on primary IDE port; nothing connected to secondary IDE port.	Set the mode jumper to Master, and connect the PX-230A as Master to secondary IDE port.
		

Hard disk connected as master
Primary IDE Port
Connect Plextor drive as master
Set Plextor drive's jumper to:
CS S M
Secondary IDE Port

Figure 10. How to install the PX-230A if your computer is originally set up in configuration C

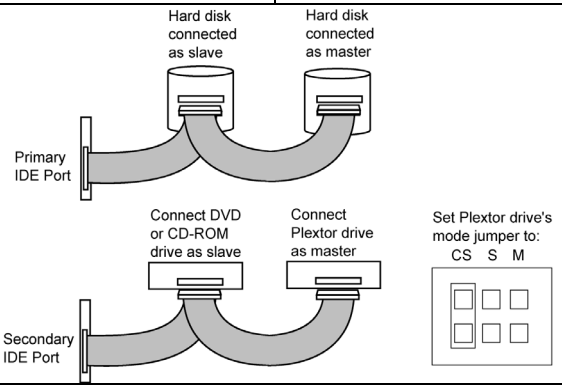
	Before PX-230A Installation	How to Install the PX-230A
D	System uses special Cable Select cables; all devices are jumpered for Cable Select.	Set the PX-230A's mode jumper to CSEL, and connect the drive to the end of the cable from the computer's IDE interface connector.
		

Figure 11: How to install the PX-230A if your computer is originally set up in configuration D

About Cable Select

The Cable Select jumper position sets the PX-230A drive to use the CSEL signal from the IDE interface for configuration purposes. This signal automatically selects the correct Master/Slave setting for the drive.

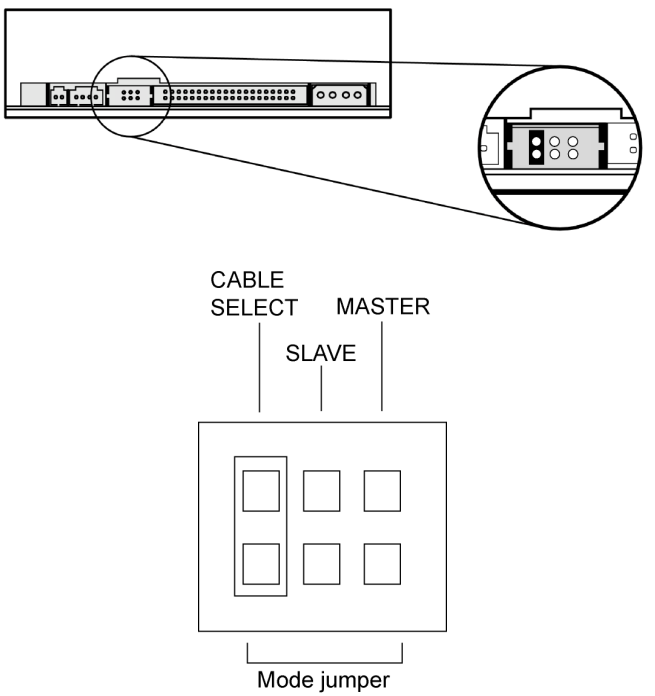


Figure 12: Configuring the PX-230A drive for Cable Select

To use Cable Select (sometimes abbreviated as CSEL), you must have:

- A computer that supports Cable Select.
- An IDE cable that supports Cable Select.

Mount the PX-230A Drive

Before proceeding to install the PX-230A drive in your personal computer, double-check your jumper setting.

Record the Serial Number

Record the serial number and TLA number of your drive on the inside front cover of this manual.

Mount the Drive in the Computer

You can mount your internal drive in any available bay. You must remove the small panel that covers the bay that you want to use.

NOTE: The drive can be mounted horizontally or vertically

If you don't have an empty bay, remove the existing IDE DVD-ROM or CD-ROM drive and install the PX-230A.

You must make a minimum of two cable connections to your PX-230A. The two cable connections that you must make are:

- IDE cable
- Power cable

There are also two optional cable connections:

- An analog audio cable connection if you are using a sound board in your computer and plan to connect the PX-230A's audio output to the audio connector on the sound board.
- A digital audio cable connection if the sound board is equipped with SPDIF or Digital-In and you wish to use the digital audio output from your PX-230A.

To mount the PX-230A drive:

1. Make sure the power to your computer and any external peripherals is turned OFF and your computer is UNPLUGGED from its power source.

2. If you haven't already removed the cover from your computer, remove it now, following the directions provided by your computer's manufacturer. Typically, this involves loosening or removing several screws on the back panel of your computer and sliding off the cover. See Figure 3 for details.

3. Remove the cover panel from the bay that will hold the drive. To remove the cover panel, pop it out by pressing outward lightly. (In some older computers, you may have to remove screws that hold the panel in place.)

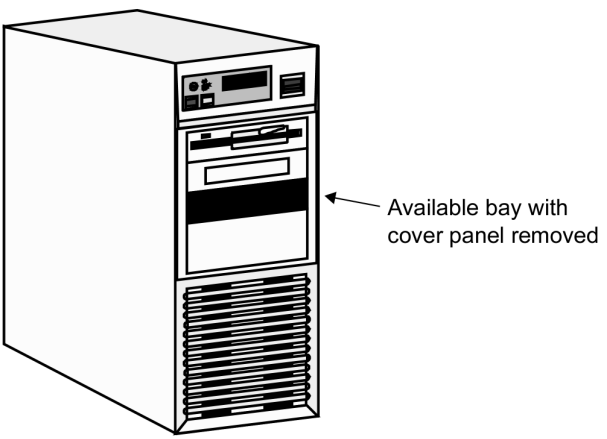


Figure 13: Removing the cover panel from a bay

4. Determine if you must install mounting rails on the sides of your drive. To do so, insert the drive into the open bay. If the drive fits tightly with little or no clearance on either side of the drive, you will not have to use mounting rails. The drive can be mounted directly into your computer. Go to step 6.

   NOTE: Plextor does not provide rails. If you need rails, you can obtain them from the computer manufacturer or from a computer supply retail or mail-order store.

5. If you must use mounting rails, fasten the rails to the lower pair of holes as shown in Figure 14. (In some instances, you may need to fasten the rails to the upper set of holes.) After fastening the rails, check their positioning by sliding the drive into the bay before you mount the drive or connect any cables.

   CAUTION: Be sure not to mistake the inner and outer face of the rail when attaching. Typically, the smooth side of the rail faces away from the drive's chassis.

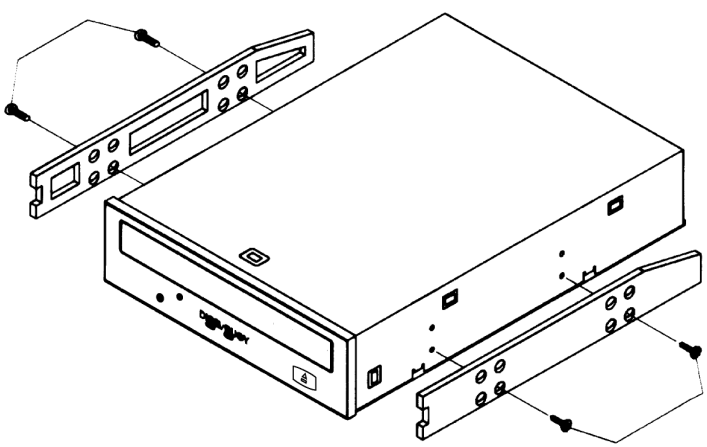


Figure 14: Installing mounting rails (if needed)

6. Locate a free connector on your computer's IDE ribbon cable, and plug it into the IDE connector on the rear panel of the Plextor drive. If possible, plug the ribbon cable into the drive before you insert the drive into your computer. Then thread the cable through the front of the open bay and back toward the motherboard. The drive should slide smoothly into the bay. If it does not, check for obstructions in the bay and ensure the side rails are attached properly.

7. If not already connected, attach the other end of the IDE ribbon cable to the connector on the motherboard.

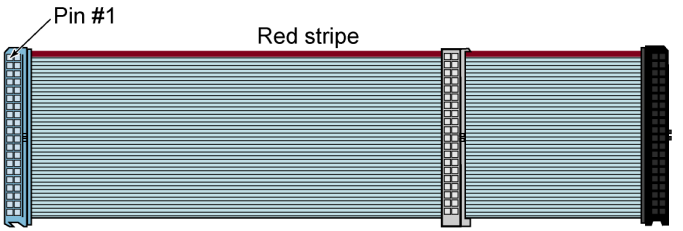


Figure 15: Connect one end of the IDE cable to the motherboard and the other end to the drive. If your Plextor drive is the only device on the cable, attach it at the end of the cable, leaving the center connector free.

CAUTION: With some IDE ribbon cables, it is easy to accidentally plug your IDE cable upside down into both your drive and the motherboard. Be sure you match the red stripe along one side of the IDE cable to Pin 1 on the motherboard and Pin 1 on the drive. (Pin 1 on the drive is closest to the power connector.) Note that each connector on most ribbon cables also has a "key" in the middle. This key should fit into a slot in the middle of each connector of the motherboard, your PX-230A drive, and any other internal IDE peripherals.

8. Double-check your work. You must ensure the side of the IDE cable with the red stripe is matched to Pin 1 on the interface board and on the drive.

CAUTION: In the case of only one IDE device, you must make certain that one end of the cable is always connected to the IDE connector on the motherboard. The other end of the connector must be connected to a device. For best results, the end connector of the cable should never be left unconnected.

9. Connect a power cable from the computer to the power connector (DC INPUT) of the drive. In most computers, you will find free power connectors that are ready for your use.

   CAUTION: The power connector on the cable and the receptacle on the drive are keyed. Do not force the power connector into the drive, or the drive and/or the computer may be damaged.

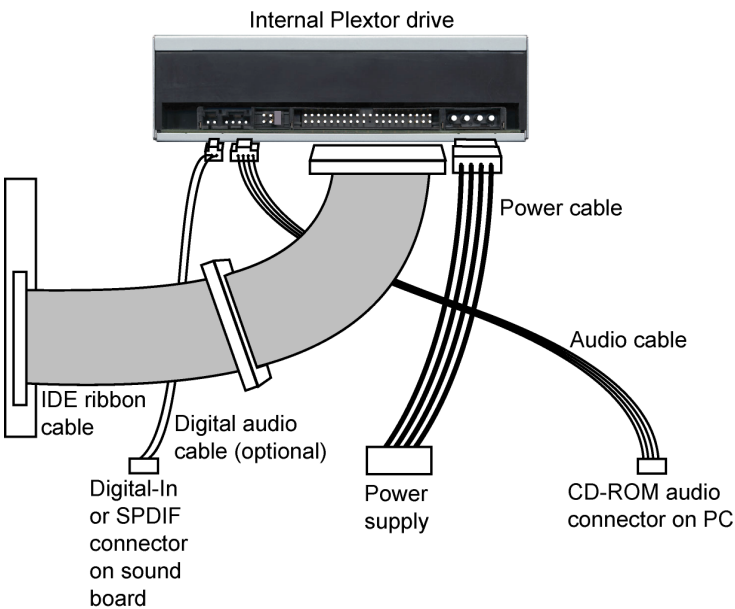


Figure 16: Cable connections for an internal IDE drive

10. Connect the analog audio cable if you want to use a sound board in your system. This cable runs from the four-pin analog audio output connector on the rear panel of your drive to the CD-ROM audio connector on the PC or your sound board. See “Using Sound Boards and Audio Cables” below for more information about audio cables.

11. Connect a digital audio cable if your sound board is equipped with the Sony/Philips Digital Interface (SPDIF) or Digital-In, and you wish to use the digital audio output from your PX-230A. This cable runs from the digital audio output connector pins on the PX-230A back panel to the sound board. (This cable is not supplied by Plextor.)

12. Mount the PX-230A drive in the computer using the four screws that were supplied with your drive. Use only these screws.

CAUTION: Do not mount your drive in your computer using screws other than those supplied by Plextor. You may damage the drive if you insert screws that are too long or the wrong thread type.

Using Sound Boards and Audio Cables

Whichever category your sound board falls into, you will find that the best source of information about installing the sound board in your computer is the board's manual. Once you have successfully installed the sound board in your computer, you can see the table below for a description of the different cable connections that need to be made.

If you need audio cables, you will have to purchase them. Refer to the table. A list of several vendors who offer audio cables is available on Plextor’s web site.

Audio Connection	Cable Required	How to Connect It
MPC audio source	MPC-compliant audio cable	Connect to MPC audio source, and to analog audio output connector at the rear of the Plextor drive.
Sound Blaster or compatible sound board	Sound Blaster-compatible analog audio cable	Connect to Sound Blaster-compatible audio board and to analog audio output connector at the rear of the Plextor drive.
Digital audio output	Cable that's compatible with SPDIF or Digital-In.	Connect to SPDIF or Digital-In connector on sound board (if sound board supports digital audio) and to digital audio output connector at the rear of the Plextor drive.

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3. Using Your PX-230A

This chapter explains how to use your PX-230A drive and how to load, handle and care for your CDs.

What Media to Use

Use the right media! Your PX-230A drive's capabilities change depending on which type of compact disc you use.

You can use these types of CD media:

- **CD-ROM**: You can immediately play or read prerecorded compact discs, such as audio CDs and data discs.
- **CD-R**: Recordable CD. You can record on these discs, but only once. You can also read them.
- CD-RW: Normal Speed, High Speed, Ultra Speed, and Ultra Speed Plus ReWritable CD. These discs support recording and re-recording (up to 1,000 times). You can also read them.

To achieve a specific writing speed, you must use the appropriate media. For instance, to achieve 52X CD-R writing speed you must use certified 52X media; and to achieve 32X CD-RW writing speed you must use Ultra Speed CD-RW media.

For CD-RW writing:

- Using Normal Speed CD-RW discs (that is, NS-RW media) you can rewrite at 4X.
- Using High Speed CD-RW discs (HS-RW media), you can rewrite at 16X.
- Using Ultra Speed CD-RW discs (US-RW media) in this drive, you can rewrite at up to 24X.
- With Ultra Speed Plus CD-RW discs (US-RW+ media) you can rewrite at up to 32X.

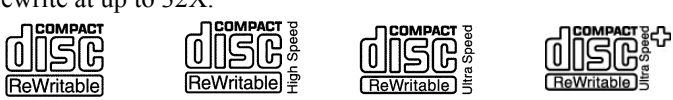

Figure 17: The logo identifies the type of CD-RW media

See “Recommended Media” on page 46 for a list of Plextor-approved media at the time this manual was printed, and see the Plextor web site at www.plextor.com for an updated list.

You can write to Ultra Speed CD-RW discs only on drives that support this media. Drives that are capable of writing to Ultra Speed ReWritable media, such as the Plextor PX-740A, are identified by a “Compact Disc ReWritable Ultra Speed” logo.

Tray Loading and Operation

To load and unload the tray:

1. While the drive is powered up, push the eject button on the front panel. The tray drawer slides out in 3–4 seconds.

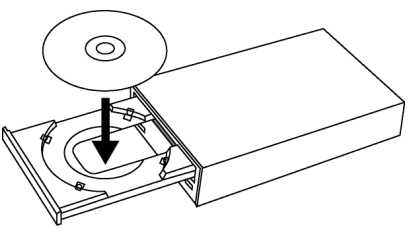

Figure 18: Loading the tray

2. Lay a CD, CD-R, or CD-RW disc in the depression in the tray, label side up.

3. Press the eject button again and the tray will slide shut within seconds.

NOTE: Always use the eject button to close the tray in a smooth and secure manner. Closing the tray by pressing the front of the drawer using your hand is not recommended and risks damage or premature wearing of the mechanism.

Handling Blank CD Media

Take care when handling blank CD media. Dust, scratches, and fingerprints on either side of the disc can cause write errors during recording. When picking up or holding blank media you can either place your fingers along the outer edge of the disc, or place one finger through the center hole and one finger on the outer edge. Once you have finished creating a disc, label it by writing on the top using permanent ink.

CAUTION: We recommend using a "non-toxic" marker, such as a Sharpie® pen, that conforms to the ASTM D-4236 standard. Some permanent markers will damage the media. Also, do not press too hard when writing on the disc.

NOTE: We do not recommend placing self-sticking CD-R labels on the disc. The weight of the label may unbalance the disc and cause write errors during recording or read errors during reading. Also, attempting to remove the label may permanently damage the disc.

Cleaning Discs

For proper read and write performance, your discs must be clean. Trying to record on a dirty disc may result in a failed session and ruin the disc.

To clean the disc, wipe the disc using a clean, soft cotton cloth to remove surface dirt such as fingerprints. Use a straight-line motion, wiping from the center out. Do not wipe the disc in a circular motion.

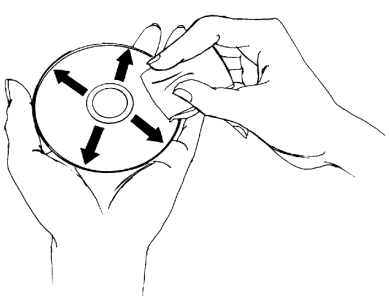

Figure 19: Wipe the disc from the center outward

HINT: Keep your frequently used discs in jewel cases at all times to prevent them from becoming dirty or damaged.

Mounting Position

You can operate your PX-230A drive in either a horizontal or a vertical position.

Writing to CD-R and CD-RW Media

In conjunction with your drive, mastering and packet writing software allows you to write audio, video, data, or other information to writable (CD-R) or rewritable (CD-RW) media. The PX-230A writes to all types of CD-RW media.

Using the Disc/Busy Indicator

The color and blink rate (in milliseconds) of the front-panel disc/busy indicator give you information about the drive's operation, as follows:

Operation	Disc/busy LED color	On/Off/Blink	Blinking interval
No disc	–	Off	–
Error	–	Off	–
Ready	Green	On	–
Read data	Green	Blink	160ms
Read disc's TOC, PMA	Green	Blink	320ms
Play audio	Green	Blink	1280ms
OPC operational	Green	Blink	640ms
Real or simulated burn	Green	Blink	640ms

4. Maintenance and Troubleshooting

This chapter explains maintenance and troubleshooting procedures for your PX-230A drive.

With proper maintenance, you can prevent problems. If trouble arises, you can often solve many simple problems on your own, rather than wait for assistance from a Plextor representative.

Cleaning the PX-230A Drive

Plextor drives are sealed against external contamination, so in a normal computer environment and with normal use, your drive should not require internal cleaning. However, if your drive has been in use for some time and has just recently started to exhibit read/write problems, it is possible that dust has accumulated on the laser lens. In this case:

- If your drive is still in warranty and you are experiencing problems, send the drive to Plextor. (See "Returns" on page 57.)
- If your drive is out of warranty, before returning the drive for repair you may want to try a short blast of canned air aimed at the center of the drive. Use only electronics-grade canned air: sterile, filtered, and moisture-free. If you notice no improvements after this step, you will need to return the drive for repair.

CAUTION: Do not attempt to clean your drive using any solvent-based cleaners. Also, do not use an air compressor, because the high-pressure blast can damage the drive.

ANOTHER CAUTION: Do not use a CD cleaning disc. Cleaning discs that use a felt pad can scratch the laser lens surface and render the drive inoperable. Cleaning discs with brushes may also scratch the lens. Moreover, these cleaning discs are often out of balance, making their operation very noisy.

Upgrading Firmware

Plextor creates firmware revisions to meet the particular needs of large computer manufacturers. It is rare that these revisions will impact the performance or operation of your drive. However, we advise that you always update your drive with the latest available firmware. Among other benefits, updating firmware ensures that your drive has the latest catalog of recommended media. Before troubleshooting a possible problem with your PX-230A drive please visit our web site at www.plextor.com to check if you have the latest firmware.

To obtain new firmware for your drive:

1. Go to the Plextor web site at www.plextor.com.

2. Look for firmware upgrades in the Support area, on the Downloads page. There is a description of the latest firmware revision and its intended use.

3. Download the firmware to your computer.

To upgrade firmware in your drive's flash memory:

1. In Windows Explorer, double-click the executable file (the filename ends in .exe) that you downloaded from Plextor's web site.

2. Accept all defaults by continuing to click on the Next button until you see the message:
   `Firmware update has completed.`

3. Restart your system.

Emergency Eject

If the computer power is turned off or the automatic eject button at the front of the drive does not work, use this procedure to open the drive.

To use the emergency eject tool to open the drive:

1. Make sure power to the drive is OFF. (That is, turn off your computer.)

2. At the front of the drive, insert the emergency eject tool, or a paper clip or other thin, rigid object, into the emergency eject hole.

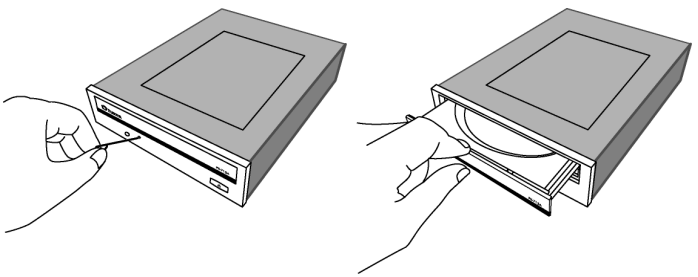

Figure 20: Emergency eject

3. Push the tool or other object straight in, until the disc tray clicks open.

4. Carefully continue to slide the disc tray open.

5. If a CD is present, remove the CD from the disc tray.

6. Carefully push the disc tray shut.

Troubleshooting

If you have problems during or right after installation of your drive, first make sure the drive is recognized.

Make Sure the Drive Is Recognized

If you're having trouble after installation, make sure the PX-230A drive is recognized by your computer. To check whether the drive is recognized:

To see if the drive is recognized in Windows:

1. Turn the computer ON. After the computer boots up, you should see the Windows display.
2. Open Windows Explorer or My Computer and ensure there is an icon for the Plextor drive, the hard disk, and another DVD or CD-ROM drive, if present. The Plextor icon may be D: or E: or another designator.
3. If the PX-230A drive is not recognized in Windows, reboot the computer and use your computer's setup program to program the BIOS to recognize it.

   NOTE: Refer to the computer's documentation for information on how to run the motherboard BIOS setup program.

   For the PX-230A, use the motherboard BIOS setup program to set up IDE Master and Slave designations, as needed for your configuration, on the primary or secondary IDE bus. If the IDE interface is disabled on your computer, you will need to enable it. If a Master or Slave device is set to "disable" or "none" or a similar designation, change it as appropriate to "enable" or "auto" (or something similar, depending on your setup program).
4. Save and exit your CMOS setup to restart your computer with the new settings.

5. In Windows 98, 98SE, or Me, once the system comes up click the Start button, then Settings, then Control Panel, then double-click on System icon, then click on Device Manager tab. Click the + sign next to the DVD/CD-ROM drives heading and look for the "PLEXTOR CD-R PX-230A" entry underneath.
   -or-
   In Windows 2000 or XP, right-click on the My Computer icon and select Properties. Click on the Hardware tab, then click on the Device Manager button. Click the + sign next to the DVD/CD-ROM drives heading and look for the "PLEXTOR CD-R PX-230A" entry underneath.

If you do not see this drive listed as one of the devices, or if it has a yellow diamond with an exclamation point (!), contact Plextor Technical Support. (See "Appendix B: Technical Support" for the different ways you can contact us.)

If you discover a problem with the PX-230A drive, do not attempt to service the drive yourself. Contact us to get an RMA number and take steps to return the drive to Plextor. See "Returns" on page 57 for details.

Further Troubleshooting

If you still have problems, visit the Plextor web site for tips and troubleshooting help.

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5. Frequently Asked Questions

Q: What is "recommended media"?
A: Recommended media are recordable or rewritable CD media that have been tested by Plextor and found to operate well consistently, from one manufacturing lot to another. For each drive, Plextor engineers test media from many different manufacturers and manufacturing facilities, creating a recommended media list and determining the optimum write strategy for that particular media type. The results are listed as "recommended media," and are also assembled into a media catalog and stored in firmware in Plextor drives. (See page 46 for a list of recommended media for the PX-230A at the time this manual was printed, and see the Plextor web site at www.plextor.com for an updated list.)

From time to time, the media catalog is updated with new manufacturers and part numbers as Plextor tests additional media. When this happens, Plextor makes new drive firmware available. You can download this new firmware and update your drive.

Q: Do I need an 80-conductor IDE cable?
A: No. Your PX-230A will operate equally well with either the older 40-conductor cable or the newer 80-conductor IDE/ATA cable.

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Appendix A: PX-230A Specifications

Minimum System Requirements—PX-230A Internal ATAPI Drive

Computer	Pentium III, 500-MHz or equivalent
Minimum RAM	128 MB
Hard Disk Size	1 GB of free space to write to a CD in image mode. (For more accurate guidelines, see the help files or documentation for the recording software you're using.)
DMA Setting	Enabled
Interface	IDE (ATAPI) supported
Operating System	Windows XP, 2000, Me, 98SE, or 98 **NOTE**: Roxio Easy Media Creator 7 requires Windows 2000/XP

Usable Formats

Logical CD Read/Write	Audio CD, Super Audio CD, Mixed Mode, CD-ROM Mode-1, CD-ROM Mode-2, CD-ROM XA Mode 2 (Form 1, Form 2), CD-I Bridge (Video CD), Photo CD (single and multi-session), CD-DA, CD-Extra, CD-R, CD-RW, CD TEXT, Karaoke CD (VCD format), Video CD, SVCD, Multi-session, CD+G (Read Only)
Write Methods, CD-R/RW	Track-at-once (TAO), disc-at-once (DAO), packet write (variable and fixed), session-at-once (SAO), multi-session, Mount Rainier (MRW)

Other Features

Buffer Underrun Protection	Buffer Underrun Proof Technology
Data Buffer	2 MB

Supported Media

Supported Media, CD	▪ Stamped CDs: Discs compliant with Red/Yellow/Green Book ▪ CD-R: Orange Book Pt II-compliant discs (Type 74, Type 80) ▪ CD-RW: Orange Book Pt III-compliant discs
Supported Media Size	12 cm, 8cm

Recommended Media

Recommended media are recordable or rewritable CD media that have been tested by Plextor. For the latest updated list of recommended media for the PX-230A, see the Plextor web site at www.plextor.com.

CD-R: 4X-52X media	Maxell, TDK, Fujifilm
CD-R: 4X-48X media	Taiyo Yuden, Mitsui, Mitsubishi/Verbatim
CD-RW: 4-32X media	Mitsubishi/Verbatim

Performance Specifications

Read Speed, CD

Speed	Mode-1 Discs	Mode-2 Discs	CD-DA Discs
22-52X CAV	Stamp,R	Stamp, R	Stamp,R
20-48X CAV	Stamp,R,	Stamp,R,	Stamp,R
17-40X CAV	Stamp,R, RW	Stamp,R, RW	Stamp,R, RW
14-32X CAV	Stamp,R, RW	Stamp,R, RW	Stamp,R, RW
10-24X CAV	Stamp,R, RW	Stamp,R, RW	Stamp,R, RW
16X CLV	Stamp,R, RW	Stamp,R, RW	Stamp,R, RW
12X CLV	Stamp,R, RW	Stamp,R, RW	Stamp,R, RW
8X CLV	Stamp,R, RW	Stamp,R, RW	Stamp,R, RW
4X CLV	R, RW	R, RW	R, RW

Performance Specifications (continued)

Write Speed, CD-R/RW

Speed	CD-R	Ultra Speed CD-RW Media	High Speed CD-RW Media	Normal Speed CD-RW Media
22-52X CAV	✓	–	–	–
20-48X CAV	✓	–	–	–
17-40X CAV	✓	–	–	–
20-32X PCAV	✓	–	–	–
32X ZCLV	–	✓	–	–
20-24X PCAV	✓	–	–	–
24X ZCLV	–	✓	–	–
16X CLV	✓	✓	–	–
12X CLV	✓	–	✓	–
8X CLV	✓	–	✓	–
4X CLV	✓	–	✓	✓

Performance Specifications (continued)

CD Transfer Rate

Speed	Write (KB/s)	Read (KB/s)
22-52X	3300-7800 (CAV)	3300-7800 (CAV)
20-48X	3000-7200 (PCAV)	3000-7200 (CAV)
17-40X	2550-6000 (PCAV)	2550-6000 (CAV)
20-32X	3000-4800 (PCAV)	–
14-32X	–	2100-4800 (CAV)
20-24X	3000-3600 (PCLV)	–
10-24X	–	1500-3600 (CAV)
16X	2400 (CLV)	2400 (CLV)
12X	1800 (CLV)	1800 (CLV)
8X	1200 (CLV)	1200 (CLV)
4X	600 (CLV)	–

Initialization Time: Time measured from power on until disc is available to read: < 6.5 sec. (typical),

Access Time: Random seek access time: < 100 msec.
1/3 Stroke access time: < 110 msec
Full stroke access time: < 250 msec

Sleep Mode: Entered after 2 minutes of no access to drive (default setting)

Wake Mode: < 4.5 sec. (max.) to start drive after sleep

Front Panel

Eject	Eject button; manual emergency eject; software eject.
Disc/Busy Indicator	Illuminated solid green when ready. Illuminated blinking green when reading and writing. (Blink rate indicates the type of activity.)
Disc Loading	Auto

Rear Panel

Power Supply

	DC +12V, ±10%	DC +5V, ±5%
Typical standby current	20 mA	250 mA
Typical CD read current (CD 52X)	800 mA	800 mA
Typical write current (CD-R 52X)	800 mA	800 mA
Typical pause current	600 mA	200 mA
Peak current	1.8 A	1.6 A

Power Consumption	Maximum 30 W for CD read/write
IDE Interface Connector	IDE bus, 40-pin flat ribbon type. Interface complies with ATA/ATAPI. Maximum total cable length cannot exceed 18 in (45.7 cm).

Rear Panel (continued)

Analog Audio Output Connector	Stereo analog output, Molex connector (L*G*G*R), MPC-3 standard: ▪ Output voltage (max. volume): 1.5V(p-p) ▪ Load impedance: 10 k ohms ▪ S/N ratio: Min. 75dB ▪ Total harmonic distortion+noise: < 2% ▪ Dynamic range: Typically 75dB (1kHz) ▪ Channel separation: Typically 70dB (1kHz) ▪ Frequency response: 20Hz to 20kHz (0dB ±5dB)
Digital Audio Output Connector	Digital audio output for input to SPDIF or Digital-In input: ▪ Sampling frequency: 44.1 kHz ▪ Output: TTL level, 3.3V ▪ Digital audio line output: 2 pins, non-isolated
Mode Jumper	Master (default), slave, cable select (CSEL)

Dimensions and Weight, PX-230A Internal ATAPI Drive

Dimensions (W/H/D) (excluding front panel)	5.75" x 1.63" x 6.8" 146 mm x 41.2 mm x 172.5 mm
Weight	1.8 lbs. (800 g)

Host Interface, PX-230A Internal ATAPI Drive

Type	ATA/ATAPI-5-compliant
PIO Transfers	Modes 0-4
Ultra DMA Transfers	Modes 0-2
Multiword DMA transfers	Modes 0-2 (DMA changes controlled by operating system and device manager)
ATAPI Command Set	Refer to the Plextor ATAPI command manual.
Inquiry string	PLEXTOR sp CD-R sp sp sp PX-230A sp sp (where “sp” is one space)

Environmental Conditions

Mounting Position	Horizontal or vertical orientation: ▪ Horizontal: ±10 degrees ▪ Vertical: 0±10 degrees, from right side orientation
Operating Temperature	5 to 40 degrees Celsius
Operating Humidity	20 to 80 % relative humidity (Non-condensing)
Storage Temperature	–40 to +65 degrees Celsius
Storage Humidity	5 to 95 % relative humidity (non-condensing)
Acoustic Noise	Playing balanced disc: Maximum 46dB Playing unbalanced disc: Maximum 47.5dB
Vibration, Operating	CD read, random: $0.5G_{0\text{-}Pk}$ (5-500Hz) CD-R, CD-RW write: $0.3G_{0\text{-}Pk}$ (5-500Hz)

Environmental Conditions (continued)

Vibration, Non-Operating	$2.0G_{0\text{-}Pk}$ (5-300Hz) Random: 0.5G (5~500Hz) (Power off, without disc)
Shock, Operating	CD read: $6.0G_{0\text{-}Pk}$ CD-R, CD-RW write: $2.0G_{0\text{-}Pk}$
Shock, Non-Operating	2ms half sine wave: Min 160 G 180in/sec square wave: Min 80G (Power off, without disc)
Electrostatic Discharge	±8KV aerial discharge, with no hard errors, no damage

Reliability

MTBF	125,000 POH at 25% duty cycle
Tray Loading	50,000 load/unload cycles
Read Error Rate	CD-ROM Mode 1: 1 block/10^{12} bits CD-ROM Mode 2: 1 block/10^{9} bits

Safety, Laser, and EMC Standards

Country/ Region	Type	Agency	Standard
USA	Safety	UL	UL 1950
	Laser	FDA	21 CFR Subchapter J
	EMC	FCC	Part15 Subpart B Class B
Canada	Safety	UL (C-UL)	CSA 22.2 No. 950-M89
Europe	Safety	CE	EN60950
	Laser	CE	EN60825-1
	EMC	CE	EN55024, EN50022 Class B

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Appendix B: Technical Support

Store Plextor's e-mail, web site, phone, and fax numbers in a convenient location. Keep your drive's serial number and a copy of your sales receipt handy as well.

If you experience a problem while installing or operating your drive, please refer first to the relevant sections of this manual regarding setup and installation (Chapters 1–3). If you do not uncover the solution there, please refer next to the maintenance and troubleshooting chapter that begins on page 37. You may also wish to refer to the Frequently Asked Questions (FAQ) section of our web site to assist you in troubleshooting the problem on your own.

NOTE: We encourage you to go the Plextor web site (www.plextor.com) before attempting to contact Technical Support. The answers to the most common questions callers ask can be found quickly in the support area. Select PlexHelper for online troubleshooting or FAQs for answers to common questions.

If you have not been successful in your quest, our Technical Support Department will help you solve problems that relate specifically to your PX-230A drive. In many cases, a problem that appears to be caused by your Plextor drive actually originates in another part of your computer. In such instances, our technical support staff will try to help you identify the part at fault and will refer you to the manufacturer of that part for further assistance.

How to Contact Plextor Technical Support

There are several ways for you to contact Plextor's Technical Support Department:

- Visit our web site (www.plextor.com) for answers to Frequently Asked Questions.

- Send us e-mail at techsupport@plextor.com. Include your telephone number and the hours during which you can be reached. Be as detailed as possible in describing your problem. Please include system configuration, hardware and software, as well as versions of drivers used.

- Call 1-800-204-0332 or 937-615-1610 and select the tech support option.

Before You E-mail or Call for Support

Please gather as much of the following information as possible before contacting us.

- The serial number and TLA (top level assembly) number of your PX-230A drive. Your serial number and TLA number appear both on the drive label and on a sticker at the rear of internal drives.

- The latest version of firmware you loaded onto the drive, if applicable.

- The version of the Windows operating system you are using.

- The brand name and model number of your computer (e.g., Dell 466/NP, Hewlett-Packard Pavilion 752n, etc.).

- The type of VGA, Super VGA, or other graphics board you use.

- Brand name and model number of any other peripherals you have installed or connected to your computer (e.g., CD-ROM, scanner, fax board, network board).

Returns

In the unlikely event that you need to return a drive to Plextor, you need an RMA (Returned Materials Authorization) number. You will need this number before any Plextor drive can be returned for replacement. Here's how you get an RMA number and return your drive:

1. Contact Plextor Technical Support. You will receive assistance in troubleshooting your system. If the drive is determined to be defective, you will receive an RMA number.

2. Plextor will e-mail you with the RMA number and shipping information.

3. When you receive the RMA number, pack the Plextor drive securely in a box, and include the RMA number with the drive.

4. Write the RMA number in large bold numbers on the outside of the box, and ship it to Plextor.

Contacting Plextor's RMA Department

You can contact our RMA Department and request an RMA number at:

- rmasupport@plextor.com
- Or by calling us at 1-800-204-0332 or 937-615-1610.

Packing Your Drive

Check the drive to make sure there is no disc inside, and if possible, pack your drive in the original box. Some of our customers have not held on to their boxes and have had to resort to less-than-secure methods to get drives back to us.

CAUTION: Never ship the drive with a CD disc inside it.

If you did not receive a box (for example, your drive came pre-installed in a computer), we recommend you pay a packaging store (such as The UPS Store) to ship your drive. If you don't have a packaging store in your area, ask for packaging pointers when you contact us to get an RMA number before returning any drive.

Shipping Your Drive to Plextor

Be sure to write the RMA number on the outside of the shipping box. Any drive sent to Plextor without an RMA number will not be accepted.

NOTE: The RMA number must be clearly visible on the outside of the shipping box.

Drives must be sent postage prepaid. We recommend that you insure your shipment, as Plextor cannot be held responsible for any damage that may occur during shipment.

Appendix C: Warranty

PLEXTOR CORP. ("Plextor") warrants your PX-230A drive against any defect in material and workmanship, under normal use, for a period of one year following its date of purchase. In the event this product is found to be defective within the warranty period, PLEXTOR will, at its option, repair or replace the defective unit.

This warranty is void: a) if the unit is operated or stored under abnormal use and/or conditions; b) if the unit is repaired, modified or altered, unless such repair, modification or alteration is expressly authorized in writing by PLEXTOR; c) if the unit is subjected to abuse, neglect, lightning strike, electrical fault, improper packaging, or accident; d) if the unit is installed improperly; or e) if the serial number of the unit is defaced or missing.

PLEXTOR will not, under any circumstances, be liable for direct, special, or consequential damages such as, but not limited to, damage or loss of property or equipment, loss of profits or revenues, cost of replacement goods, or expense or inconvenience caused by service interruptions. Under no circumstances will any person be entitled to any sum greater than the purchase price paid for the unit.

To obtain warranty service, you must contact PLEXTOR's Technical Support Department by e-mail (techsupport@plextor.com) or by calling 1-800-204-0332 or 937-615-1610. The Technical Support Department will attempt to diagnose and correct your problem. If the unit does not function properly, they will provide you with a Return Material Authorization (RMA) number. You may be asked to furnish proof of purchase to confirm that the unit is still under warranty.

All product returns must be authorized in advance by PLEXTOR. Authorization is confirmed by issuance of the RMA number, which must be written prominently on the outside of the box in which the defective unit is returned to PLEXTOR.

All drives returned to PLEXTOR must be securely packaged and shipped postage prepaid.

The drive will be returned to the customer at Plextor's expense when originating within the United States. For a drive originating outside of the United States, the customer is responsible for shipping costs in both directions.

NOTE: Warranty validity is limited to that applicable in the location where the drive was originally purchased.

If You're Outside the U.S. or Canada

Note that the warranty and RMA policy only apply to the United States and Canada. If you are in South America, contact your dealer or reseller for all warranty and RMA claims.

Index

A

access time · 49
achieving best performance · 19, 20
analog audio
  cable · 25, 30
  output connector · 8, 30, 31, 51
ATAPI command set · 52
audio
  analog · 8, 51
  digital · 31, 51

B

bay cover panel · 26
black tray · 2
blue book · 46
box contents, · 9
buffer · 2, 45
Buffer Underrun Proof Technology · 2

C

cable
  40-conductor IDE · 14
  80-conductor IDE/ATA · 14
  analog audio · 25
  audio · 30
  cable select, replacing · 15
  digital audio · 25
  IDE · 25, 28
  MPC · 31
  power · 16, 25
  Sound Blaster · 31
  SPDIF · 31
cable connections, · 29
cable select · 13, 23, 24, 51
  cable for · 15
  configuring for · 24
  identifying · 15
  installation · 23
  master · 15
  setting mode jumper · 17
  signal · 24
  slave · 15
  using 80-conductor cable for · 15
CD
  reading speed · 47
  recording modes · 2, 45
  write methods · 2, 45
CD cleaning disc, don't use · 5, 37
CD-DA reading speed · 1
CD-R
  compatibility · 2
  media · 33, 46
  reading speed · 1
  writing · 36
  writing speed · 1, 48
CD-R/RW software · 4
CD-ROM, playing · 33
CD-RW
  compatibility · 2
  high speed · 48
  media · 33, 46
  normal speed · 48
  reading speed · 1
  ultra speed · 48
  writing · 36
  writing speed · 48
CD-TEXT · 3
cleaning disc · 35
cleaning your drive · 37

precautions · 5, 37
closing tray · 34
compatibility
CD-R · 2
CD-RW · 2
computer, minimum, PX-230A · 3, 45
configuration
cable select · 24
PX-230A minimum · 3, 45
types of IDE · 13
connection
sound board and · 30
connector
analog audio output · 8, 30, 51
digital audio · 8, 30, 51
IDE interface · 9, 28, 50
power · 9
connectors and jumpers, PX-230A
rear-panel · 8, 50, 51
contents of box · 9
controls, front-panel, PX-230A · 7, 50
cover panel, bay · 26
CSEL · *See* cable select

D

data buffer · 45
digital audio · 31
digital audio extraction · 2
digital audio output · 51
connector · 8, 30, 31, 51
Digital-In connector · 8, 30, 31, 51
dimensions, PX-230A · 3, 51
disc
cleaning · 35
labels · 35
loading · 50
disc/busy indicator · 7, 50
blink rate · 36
color · 36, 50
DMA support · 2, 52
drive, recognizing in Windows · 40

E

eject
emergency · 8, 39
methods for · 50
eject button · 8
closing tray · 34
electrostatic discharge
specification · 53
EMC standards · 53
emergency eject hole · 8, 39
emergency eject tool · 8, 9, 39
error rate specification · 53

F

FAQs · 43
features · 2
firmware
obtaining · 38
upgrading · 2, 38, 43
flash memory · 2, 38
formats · 45
CD · 2
frequently asked questions · 43
front panel controls · 7, 50

H

hard disk size · 3, 45
high speed CD-RW
media · 33
write speed · 48
host interface, PX-230A · 52
humidity
specification · 52
storage · 52

I

IDE cable, 40-conductor · 14
IDE cable, connecting · 28
IDE configuration
  determining for PX-230A · 13
  examples · 19
  selecting · 19
  types of · 13
IDE interface connector · 9, 28, 50
IDE ports · 13
IDE/ATA cable, 80-conductor · 14
initialization time · 49
inquiry string, PX-230A · 52
installation
  examples · 19
  PX-230A · 7
interface, PX-230A · 45
  ATAPI required · 3

J

jumper, mode · 9, 16, 51

K

Karaoke CD · 3

L

label, disc · 35
laser standards · 53

M

maintenance · 37
master · 13, 16, 19, 51
  cable select · 15
  setting drive as · 16
  setting in BIOS · 40
  setting mode jumper · 17
media
  care and handling · 35
  CD-R · 33, 46
  CD-RW · 33, 46
  high speed CD-RW · 33
  recommended · 43, 46
  size · 46
  supported · 2, 46
  ultra speed CD-RW · 33
  ultra speed plus CD-RW · 33
memory, minimum · 3, 45
minimum cable connections, · 25
minimum computer · 3, 45
minimum configuration · 3, 45
minimum RAM · 3, 45
MMC-4 command set · 2
mode jumper · 9, 51
  changing · 17, 18
  setting · 16
motherboard BIOS setup program · 40
mounting · 25, 26
mounting position · 25, 36, 52
mounting rails · 27
MPC-compliant audio cable · 31
MTBF · 53
multiword DMA support · 2, 52

N

noise specification · 52
normal speed CD-RW
  media · 33
  write speed · 33, 48

O

OPC · *See* optimum power control
opening the computer · 12
operating system · 3, 45
optimum power control · 3
optional cable connections · 25
orange book · 2, 46

P

packing for shipment · 57
PIO support · 2, 52
plug and play, support for · 2
position, mounting · 25, 36, 52
power
  cable · 16
  connecting cable · 29
  connector · 9, 50
precautions · 4
primary IDE port · 13
PX-230A
  achieving best performance · 20
  configuration examples · 19
  connectors and jumpers, rear-panel · 8
  controls, front-panel · 7
  host interface · 52
  inquiry string · 52
  installation · 7
  installation examples · 19
  installation, cable select · 23
  interface · 2, 3, 45
  minimum computer · 45
  mode jumper · 16
  power requirements · 50
  rear-panel connectors · 8, 50, 51

Q

questions, frequently asked · 43
quickstart installation, · 11

R

rails · 27
RAM, minimum · 3, 45
read specification, CD · 47
reading speed
  CD-R · 1
  CD-RW · 1
rear-panel connectors, PX-230A · 8
recognizing drive in Windows · 40
recommended media · 46
  definition · 43
recording modes, CD · 2, 45
red book · 46
reliability · 53
returns · 9, 57
RMA number · 9, 57, 58

S

safety standards · 53
screws, mounting · 30
secondary IDE port · 13
security sticker · 10
selecting an IDE configuration · 19
serial number, recording · 25
shipping your drive · 9, 57, 58
shock specification · 53
slave · 13, 19, 51
  cable select · 15
  setting drive as · 16
  setting in BIOS · 40
  setting mode jumper · 17
sleep mode · 49
software · 4, 36
  CD-R/RW · 4
Sony/Philips digital interface · *See* SPDIF
Sound Blaster-compliant audio
  cable · 31
sound board, connections to · 30
SPDIF
  cable · 31
  connector · 8, 30, 31, 51
specifications · 45
speed
  monitoring · 36
  reading CD-R · 1
  reading CD-ROM · 47
  reading CD-RW · 1
  writing CD-R · 1

stereo output signal · 8, 51
support · 55

T

technical support · 55, 56
temperature
  specification · 52
  storage · 52
TLA code · 25
transfer rate, CD · 49
tray
  closing · 34
  front door · 7
  loading and unloading · 34
  loading specification · 53
troubleshooting · 40

U

ultra DMA support · 2, 52
ultra speed CD-RW
  media · 33
  write speed · 33, 48
ultra speed plus CD-RW
  media · 33
  write speed · 33
upgrading firmware · 2, 38, 43

V

vibration specification · 52

W

wake mode · 49
warranty · 59
web site, Plextor · 55
weight, PX-230A · 51
white book · 46
Windows, version required · 3, 45
write methods, CD · 2, 45
writing a CD image · 3, 45
writing speed
  achieving · 33
  CD-R · 1, 48
  CD-RW · 48
  high speed CD-RW · 33
  monitoring · 36
  normal speed CD-RW · 33
  ultra speed CD-RW · 33
  ultra speed plus CD-RW · 33
writing to CD-R · 36
writing to CD-RW · 36

Y

yellow book · 46

PLEXTOR CORP.
48383 Fremont Blvd.
Suite 120
Fremont CA 94538-6509

Phone: **510-440-2000**
Fax: 510-651-9755
E-mail: info@plextor.com

www.plextor.com